

POVERTY IN INDIA- METHODOLOGICAL ISSUES AND IMPLICATIONS FOR DEVELOPMENT

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ABSTRACT

India suffers from a lot of poverty, which means that many people there do not have enough money or Minimum Level of Acceptable standard of living in a society. Poverty in India is widespread, and a variety of methods have been proposed to measure it. The official measure of Indian government based on per capita expenditure for a person to consume enough calories and be able to pay for associated essentials to survive. There are large differences among various estimates of poverty and they are mainly because of using different price indices and weights. Over time, the fixed basket may require change, because there have been significant changes in the consumption pattern of all sections of population. Before selecting a set of poverty indicators, it is important to be clear on exactly what one wants to measure and why. Different approaches to poverty measurement are required for different types and levels of poverty.

The MPI methodology considers local cultural, economic, climatic and other factors while measuring the poverty. The total poverty ratio declined by 0.85 percentage points per annum in the pre-reform period (1983-94) and 0.70 percentage points in the post reform period (1994-05). One of the prime reasons for the slow reduction of poverty line in India is the “Welfare trap”. Despite all the causes, India currently adds more millions people to its middle class every year than any other country same as china. Poverty decline in India is fastest just after china & country will be poverty free by 2020

KEYWORDS: Poverty Line, Inequality, Welfare-Trap, Traditional, Multidimensional

INTRODUCTION

India still has the world’s largest number of poor people in a single country. Of its nearly 1 billion inhabitants, an estimated 350-400 million are below the poverty line, 75 per cent of them in the rural areas. More than 40 per cent of the population is illiterate, with women, tribal and scheduled castes particularly affected. The economic prosperity has indeed been very impressive in India, but the distribution of wealth has been very uneven. The main causes of poverty are illiteracy, inequalities of income, unequal distribution/ division of land, over exploitation of resources, employment opportunities, social and cultural factors and a population growth rate by far exceeding the economic growth rate.

During 2005 37.2 % of the Indian population lives below the poverty line and it was reduced to 32.7% during 2011 and now in 2013 the numbers are 21.9 %.

MEANING AND DEFINITION

Poverty: is described as “pronounced deprivation in well-being”. (World development report 2000-01). Poverty describes the current status of an entity with regard to the attainment of a critical level in a dimension (like income or

nutrition). Poverty refers to inability of individuals to have access to a **Minimum Level of Acceptable** standard of living in a society.

The poverty occurs when a person or group of people suffers from the lack of the essential resources for minimum standards of well-being and life. Like material resources food safe drinking water or they may be social resources access to information, education, health care, shelter, social status, political power. In the words of Amartya Sen, poverty is the lack of fundamental economic, human, political and socio-cultural capabilities.

What Is a Poverty Line?

The poverty line defines a threshold income. Households earning below this threshold are considered poor. Different countries have different methods of defining the threshold income depending on local socio-economic needs.

Where to Draw the Poverty Line?

The World Bank uses \$1.25 per person a day benchmark for extreme poverty. It is based on the average of the national poverty lines of the world's 15 poorest countries. The Asian Development Bank (ADB) uses somewhat higher benchmark of \$1.35 per person a day, based on the surveys from 16 Asian countries. Respectively, they estimated 42% and 55% poverty in India in 2010. It is clear that slight change in the line can give widely different estimation of poverty. Just look at the following graph of poverty by the World Bank at various poverty lines.

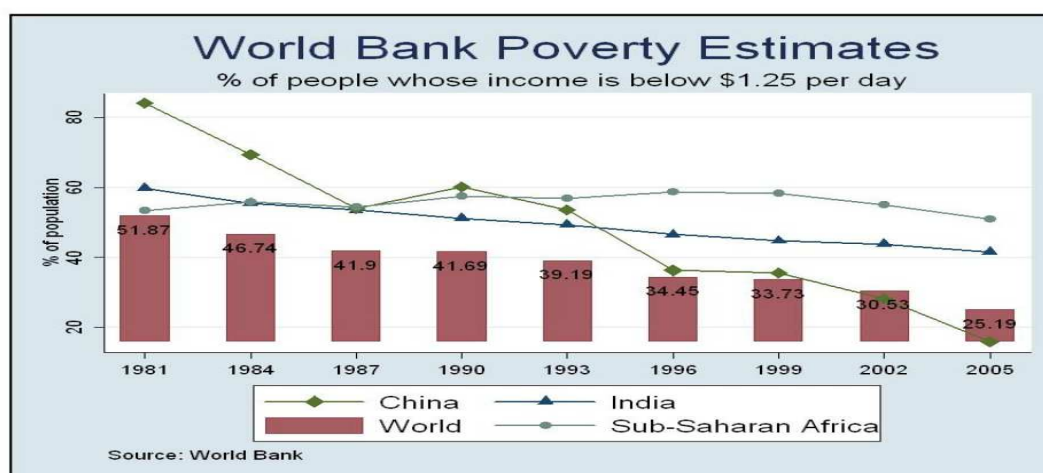


Figure 1

Table 1: List of Countries by Percentage of Population Living in Poverty

Country	Population Living Under 1.25 and 2 Dollar (PPP) A Day (%) (International Poverty Line)		Population Living Below National Poverty Line (%)
	< \$1.25	< \$2	
Bangladesh	29.0	76.5	26.0
China	13.0	29.7	13.4
India	32.6	68.7	29.8
Nepal	24.8	57.2	25.2
Pakistan	21.0	60.1	22.3
SouthAfrica	13.7	31.3	23.0
Sri Lanka	7.0	29.1	8.9

Source: Author

What is the Indian Poverty Line?

Earlier, India used to define the poverty line based on a method defined by a task force in 1979. It was based on expenditure for buying food worth 2,400 calories in rural areas and 2,100 calories in urban areas. In 2011, the Suresh Tendulkar Committee defined the poverty line on the basis of monthly spending on food, education, health, electricity and transport. According to this estimate, a person who spends Rs. 27.2 in rural areas and Rs. 33.3 in urban areas a day are defined as living below the poverty line. For a family of five that spends less than Rs. 4,080 per month and Rs. 5,000 per month in rural and urban areas respectively are considered below the poverty line. This has been criticised for fixing the poverty line too low.

General Poverty Situation in India

Table 2 shows national poverty levels for the last twenty years, using methodology suggested by the Tendulkar Committee. According to these estimates, poverty declined at an average rate of 0.74 percentage points per year between 1993-94 and 2004-05, and 2.18 percentage points per year between 2004-05 and 2011-12.

Table 2: National Poverty Estimates: 1993 to 2012 (% BPL)

Year	Rural	Urban	Total
1993 – 94	50.1	31.8	45.3
2004 – 05	41.8	25.7	37.2
2009 – 10	33.8	20.9	29.8
2011 – 12	25.7	13.7	21.9

Source: Anonymous (2012)

Table 3: State-Wise Poverty Estimates: 2004-05 to 2011-12 (% below Poverty Line)

State	2004-05	2011-12	Decrease
Andhra Pradesh	29.90	9.20	20.70
Arunachal Pradesh	31.10	34.70	-3.60
Assam	34.40	32.00	2.40
Bihar	54.40	33.70	20.70
Chhattisgarh	49.40	39.90	9.50
Delhi	13.10	9.90	3.20
Goa	25.00	5.10	19.90
Gujarat	31.80	16.60	15.20
Haryana	24.10	11.20	12.90
Himachal Pradesh	22.90	8.10	14.80
Jammu and Kashmir	13.20	10.40	2.80
Jharkhand	45.30	37.00	8.30
Karnataka	33.40	20.90	12.50
Kerala	19.70	7.10	12.60
Madhya Pradesh	48.60	31.70	16.90
Maharashtra	38.10	17.40	20.70
Manipur	38.00	36.90	1.10
Meghalaya	16.10	11.90	4.20
Mizoram	15.30	20.40	-5.10
Nagaland	9.00	18.90	-9.90
Odisha	57.20	32.60	24.60
Puducherry	14.10	9.70	4.40
Punjab	20.90	8.30	12.60
Rajasthan	34.40	14.70	19.70
Sikkim	31.10	8.20	22.90

Tamil Nadu	28.90	11.30	17.60
Tripura	40.60	14.10	26.50
Uttar Pradesh	40.90	29.40	11.50
Uttarakhand	32.70	11.30	21.40
West Bengal	34.30	20.00	14.30
All India	37.20	21.90	15.30

Source: Anonymous (2012), Note: A negative sign before the number in column four (decrease) indicates an increase in percentage of population below the poverty line.

State-wise data is also released by the NSSO. Table 3 shows state-wise poverty estimates for 2004-05 and 2011-12. It shows that while there is a decrease in poverty for almost all states, there are wide inter-state disparities in the percentage of poor below the poverty line and the rate at which poverty levels are declining.

Poverty Estimation in India by Income / Spending

Table 4: State-Specific Poverty Lines (Rupees per Capita per Month)

Sl. No.	State	Rural			Urban		
		1973-74	1993-94	2004-05	1973-74	1993-94	2004-05
1	Andhra Pradesh	41.71	163.02	292.95	53.96	278.14	542.89
2	Assam	49.82	232.05	387.64	50.26	212.42	378.84
3	Bihar	57.68	212.16	354.36	61.27	238.49	435.00
4	Gujarat	47.10	202.11	353.93	62.17	297.22	541.16
5	Haryana	49.95	233.79	414.76	52.42	258.23	504.49
6	Himachal Pradesh	49.95	233.79	394.28	51.93	253.61	504.49
7	Karnataka	47.24	186.63	324.17	58.22	302.89	599.66
8	Kerala	51.68	243.84	430.12	62.78	280.54	559.39
9	Madhya Pradesh	50.20	193.10	327.78	63.02	317.16	570.15
10	Maharashtra	50.47	194.94	362.25	59.48	328.56	665.90
11	Orissa	46.87	194.03	325.79	59.34	298.22	528.49
12	Punjab	49.95	233.79	410.38	51.93	253.61	466.16
13	Rajasthan	50.96	215.89	374.57	59.99	280.85	559.63
14	Tamil Nadu	45.09	196.53	351.86	51.54	296.63	547.42
15	Uttar Pradesh	48.92	213.01	365.84	57.37	258.65	483.26
16	West Bengal	54.49	220.74	382.82	54.81	247.53	449.32
	All India	49.63	205.84	356.30	56.76	281.35	538.60

Source: Mahendradev and Ravi (2007)

Table 5 indicates the poverty lines set across the different states and for All India for pre and post reform periods. The poverty lines are usually lower for rural areas compared to urban areas in both the periods. The difference in the poverty line between Urban and Rural areas has been gradually increasing from 1983 (Rs. 56.76: U and Rs.49.63: R) to 2004-05 (Rs.538.60: U and Rs. 356.30: R) respectively. This clearly indicates that there is a widening gap of disparities between urban and rural areas, over the years.

Table 5: Poverty Line for India (Rs. Per Capita per Month, in Current Prices)

Year	Rural	Urban
1973-1974	49.6	56.8
1977-1978	56.8	70.3
1983-1984	89.5	115.7
1987-1988	115.2	162.2
1993-1994	205.8	281.4
1999-2000	327.6	454.1

Table 5: Contd.,		
2004-2005	356.3	538.6
2009-2010	672.8	859.6

Source: Author

Conceptual Issues in the Measurement of Poverty

The choice of variables will affect findings on the composition as well as on the size of the poor population, and hence the policy response will differ accordingly.

- **Absolute Poverty Approach**

The absolute approach to defining poverty begins with the concept of “minimum subsistence”, that is, some bundles of goods and services that are regarded as essential to the physical need of an individual or a family. Those who do not possess the economic resources to obtain these goods and services are considered poor. In the most severe conception of the absolute approach, this bundle of economic goods consists of the minimum caloric intake essential to human existence, and perhaps some forms of shelter.

Criticisms

The most severe criticism against the absolute approach is that within that approach, human needs are interpreted as being predominantly physical needs that is, for food, shelter and clothing rather than as social needs.

Moreover, the measurement of costs for food is a problematic matter. - The amount and cost of the food which is eaten depend on the social roles played and the dietary habits observed, as well as the kinds of foods available in the market. Specifying the costs of meeting dietary needs is therefore very difficult.

In sum, the absolute poverty approach involves conceptual and methodological difficulties, including (i) the determination of necessities, and (ii) the quantitative assessment of the demand for necessities. Faced with these complexities, many researchers have suggested an alternative approach to defining poverty, one that depends on relative standards.

- **Relative Poverty Approach**

According to the relativist approach to defining poverty, the mean or median value of national income represents the economic indicator which corresponds to the dominant life style. An individual or a family whose income is less than that value can be defined as being on the poverty threshold, with no means to live in that life style. For example, a person or family with less than one half of the average after-tax income can be said as poor.

By defining poverty in these terms, the relativists can avoid to define “absolute needs” and put emphasis on the equitable distribution of income. The proponents of the relative approach request the government to formulate policies in redistributing wealth in order to tackle the poverty problem.

The relative approach to defining poverty originated in the 1960s from the critics of the welfare policy adopted by the United Kingdom. The United Kingdom was committed to eliminating poverty by providing various welfare services during the postwar period. Relative poverty prevented people from participating in activities which were customary in the societies in which they lived.

Criticisms

First, it spreads poverty in the statistical sense that some fixed proportion of the population is always regarded as poor. Poverty therefore persistently exists. Second, while a relative measure of poverty can give an estimate of the size of the poor, it cannot provide any information on the quality of life of the poor. The government, therefore, has no information on the amount of assistance poor families need in order to reach an acceptable standard of living.

- **Budget Standards Method**

The budget standards method to define poverty is based upon the determination of a list of necessities. Persons who cannot obtain all items on the list will be considered poor. It is an absolutist approach in structure but various socially determined essential needs are incorporated to form a set of budgets. In other words, the budget standards definition is based on the notion of a basket of goods and services, having the elements of “subsistence” and “basic minimums for social lives”.

In operation, an inventory of budget standards is assembled by determining the absolutely basic ingredients of human subsistence. Such a list may include minimum food, clothing, shelter and fuels. To this list of basic minimums we may add means of transportation, some recreational activities, and certain goods and services we suppose appropriate, if not absolutely essential. Those persons who cannot afford all the items will be classified as poor. Ex: Budget standards components are food, transportation, clothing and footwear, electricity and fuel, household goods, personal care goods, personal goods, social activities, health care expenses, furniture, electrical appliances.

Criticisms

First, there is difficulty in producing generally acceptable criteria for selecting the items to be included into the list. Second, the exposition of need also depends on the development of societies. Thus subjective value-judgments have to be made in the context of each community’s economic circumstances to establish the components.

Third, it requires enormous efforts to develop a budget for such expenditure components and to keep each list up-to-date in line with changing social circumstances.

Income Proxy Measures

The income proxy method is a behaviorist approach based on people’s consumption patterns. Data on household expenditure are used as an income proxy to measure poverty. The theory is based on the fact that the consumption patterns of various family compositions are the results of the relative competition between need and choice. Whether need or choice prevails depends on the amount of income earned by the families. In practical terms, low income families usually spend a greater proportion of expenditure on necessities, while higher income families will purchase more quality goods and non-necessities. Therefore, if researchers or governments can work out from household expenditure data, identify a proper proportion of expenditure on necessities against the total expenditure; a poverty threshold can be worked out.

Criticisms

As societies are going through rapid changes, any standard devised in the past is difficult to be justified in new circumstances. Hence, these standards have to be recurrently checked in order to tie in with the development of social trends. However, the measures of ever-updating the standards would be costly and time-consuming.

MEASURES OF POVERTY

The poverty line has been the most common means of defining poverty. It identifies a basic level of achievement (usually a minimum level of calorie intake or consumption) that is necessary in a chosen dimension (nutrition or income). All the persons who don't attain the prescribed minimum level are defined as poor. Some of the methodologies to find out the poverty are:

TRADITIONAL OR ONE-DIMENSIONAL POVERTY MEASURES

- **Head Count Ratio (HCR):** proportion of total population that falls below poverty threshold income or expenditure. Based on either National PL or Dollar-a-day PL.

$$HCR = \frac{m}{n}$$

m= no. of poor population, n = total population

This index provides simple quantitative information about the incidence of poverty in a given society. It is useful and often referred to, because easily understandable. Its main weakness is that it can't take into account the intensity of poverty, e.g. in a situation where a poor get poorer the HCR doesn't change. That's why beside the head count ratio we need others indexes of poverty.

To overcome this drawback, we use the Poverty Gap, which measures the intensity (deepness) of poverty. **The Poverty gap** is the mean distance of the poverty line for the whole population, expressed as a percentage of the threshold value.

Poverty Gap Index (PGI)

Unlike HCR, it gives us a sense of how poor the poor are. It is equivalent to income gap below PL per head of total population, and expressed as a percentage of the poverty line.

$$PG = \left(\frac{1}{n} \right) \sum_{i=1}^m \left(\frac{Z - y_i}{Z} \right)$$

m= no. of poor population, n = total population,

z= poverty line, yi =income of i-th person

Here, in the case of a poor getting poorer (or richer but still under the poverty line) whereas the incidence of poverty (HCR) would be unchanged, the depth (PG) would change. Policy implications derived from income based measures can be easily found through the poverty gap because it gives us an idea of the cost of eradicating poverty, i.e. the additional quantity of resources that would normally be needed by the poor in order to reach the poverty line.

The poverty gap is a useful statistics to assess how much resources would be needed to eradicate poverty through cash transfers perfectly targeted to the poor. Assume for example that the poverty gap is equal to 0.20. This means that the cash transfer needed to lift the poor out of poverty each poor person represents 20 percent of the poverty line. If the mean

income in the country is equal to twice the poverty line, the cash transfer would represent 10 percent of the country's mean income. Now, if it is the mean income of the non-poor which is equal to twice the poverty line, and if half the population is poor, it can be shown that the tax rate that would have to be imposed on the non-poor to lift the poor out of poverty with perfectly targeted transfers would be 20 percent again. If the mean income of the non-poor is equal to four times the poverty line, under the same assumption the necessary tax rate would be 10 percent. Such simple simulations can be used to communicate in an intuitive manner the meaning of the poverty gap. In practice however, given that perfectly targeted cash transfers to eradicate poverty are neither feasible nor necessarily a good thing (high tax rates could stifle economic growth and thereby future poverty reduction), one must be careful in their use.

- **Squared Poverty Gap Index (SPG)**

Adds the dimension of inequality among the poor to the poverty gap index. For a given value of the PGI, population with greater dispersion of income among poor indicates a higher value for the SPG.

$$SPG = \left(\frac{1}{n} \right) \sum_{i=1}^m \left(\frac{z - y_i}{z} \right)^2$$

m = no. of poor population, n = total population,

z = poverty line, y_i = income of i-th person

This is often described as a measure of the severity of poverty. While the poverty gap takes into account the distance separating the poor from the poverty line, the squared poverty gap takes the square of that distance into account. When using the squared poverty gap, the poverty gap is weighted by itself, so as to give more weight to the very poor. Said differently, the squared poverty gap takes into account the inequality among the poor.

- **FGT (Foster –Greer-Thorbecke Index):** is a popular class of measures of poverty and by varying the degree of poverty aversion, it can be seen that it condense the concept of HCR along with other measures of poverty.

The FGT index is defined as, $P_\alpha = \frac{1}{n} \sum_{i=1}^q \left(\frac{z - c}{z} \right)^\alpha$

Where,

n is population size

c is welfare levels ordered from poor to rich;

z is the poverty line

q is the number of poor people.

When $\alpha=0$ the FGT measure reduces to the HGR

$\alpha=1$ results in **poverty gap index**

$\alpha=2$ results in **squared poverty gap index**

- **Food Deprivation Index or Sitaram Index (SI) or Food Consumption Deprivation**

It is noted that the gap between the rural and urban food deprivation has increased in post reform period (table). There has been no significant improvement in rural food deprivation in post reform period, indicating that the reforms helped the urban poor and not the rural poor. Some states seem to have benefited from economic reforms than others.

$$SI = \frac{100}{n_k \sum_{i=1}^{n_k} M_{ki}} \sum_{i=1}^{n_k} \left(\frac{C^* - C_k(Y_{ki})}{C^*} \right) * M_{ki}$$

Where, k =sample

n_k =Sample size

C^* =maximum food consumption over the sample

$C_k(y)$ = the Engel curve for food for k^{th} sample

y_{ki} = total expenditure for the i^{th} household in k^{th} sample

M_{ki} = the multiplier of the i^{th} household in the k^{th} sample

The Main Criticisms to the Traditional Method

(i) Income is a somewhat imprecise concept (ii) the assessment of poverty on the basis of the sole monetary approach hides the plurality of situations faced by the poor and (iii) the separation between poor and non-poor in a discriminant way is unrealistic. Indeed, this rigid discrimination between poor and non-poor poses the problems of those peoples whose income is almost the same but who are not on the same side of the poverty line. Though they are bound to be confronted to the same economic problem they are not treated the same way.

The main advantages of traditional measures are from a practical order and lies in the simplicity of measuring them. They can be useful in counting poor people and targeting a population at economic risk. Concerning the anti-poverty strategy, these measures based on income give information on how could be implemented a transfer policy to allow poor people to reach the poverty line. These policies are useful because they can alleviate poverty but in the short term.

However, when you take poverty to be multidimensional in its causes and consequences, the problem is that there is no guarantee that an economic answer to the economic dimension problem would reach the other dimensions and that it would allow poor people to leave persistently from their situation of poverty.

To do this, we need information on how to implement a structural policy. Traditional measures seem unable to provide us with this kind of information. Henceforth, there is a need for measures of poverty that can take account of the multidimensionality of poverty in the spirit of the capabilities and functionings approach.

Multidimensional Approaches

Multidimensional approaches such as Sen's capabilities allow us to have a more shaded understanding of poverty because it takes into account its complex and pervasive nature.

- **The Sen Index**

This index is attributed to Sen (1976). It incorporates the Head Count Index, the income gap, and the Gini coefficient.

Sen PovertyIndex (s) is:

$$S = H [I + (1 - I) G_p]$$

Where

I = the average income shortfall as a percentage of the poverty line

y_i = income of the i th poor household

z = poverty line income

q_z = number of households with incomes below z

H = q/n ; headcount ratio

N = total number of households

G_p = Gini coefficient among the poor = 0 = $G_p > 1$.

S is an increasing function of the headcount index and an increasing function of the income shortfall. Given that the G_p ranges from zero to one, S is also an increasing function of G_p :

$\frac{dS}{dH}$	> 0	$\frac{dS}{dI}$	> 0	$\frac{dS}{dG_p}$	> 0
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The Sen Index has a major drawback. It is more responsive to improvements in the headcount than it is to reduction in the income gap or to improvements in the distribution of income among the poor. This index indicates that the efficient way to reduce poverty is to help the least needy first and the neediest last.

- **The Human Development Index (HDI):** The HDI is the most recent composite

Index devised by the United Nations Development Programme (UNDP, 1990). This index focuses on human development. It incorporates income and non-income factors. Three factors- longevity, knowledge and income are the variables of the index. Longevity is measured by life expectancy at birth (e_0), knowledge is measured in terms of literacy. The third variable is per capita income. Generally, therefore, UNDP's human development HD is specified as:

$$HD = f(e_0, lit, Y) \dots\dots\dots(7)$$

Where

e_0 = life expectancy at birth

lit = literacy rate

Y = per capita income

These three indicators-life expectancy (X_1), literacy (X_2), and the logarithm of real GDP per capita (X_3) are

specified at the national level as components of the index. By looking across a range of countries, the maximum and minimum values for each indicator are established. A 'deprivation' index for the i th indicator and the j th country is then defined as:

Where: $0 < I_{ij} < 1$

Human Development Index for each country which consists of an average of three measures, one for income, one for life-expectancy, and one for literacy. Of the total 156 countries calculated India stands in 128th position during 2005 with a HDI of 0.619 and now it has been increased to 136th position in 2013 with HDI of 0.962.

Table 6: Human Development Index of India – Over the years

Year	Life Expectancy at Birth	Expected Years of Schooling	Mean Years of Schooling	GNI Per Capita (PPP In 100 US\$)	HDI Value
1980	55.1	6.3	1.9	9.44	0.32
1985	56.9	7.3	2.4	10.82	0.35
1990	58.2	7.8	3.0	12.90	0.38
1995	59.6	8.3	3.3	15.10	0.41
2000	61.3	8.4	3.6	18.40	0.44
2005	62.7	9.9	4.0	24.01	0.48
2010	64.4	10.3	4.4	33.37	0.51
2012	65.8	10.7	4.4	32.85	0.57

In India Kerala (0.814) stands first in Human Development Index among the states, while Chandigarh (0.860) stands first in Human Development Index among the Union territories.

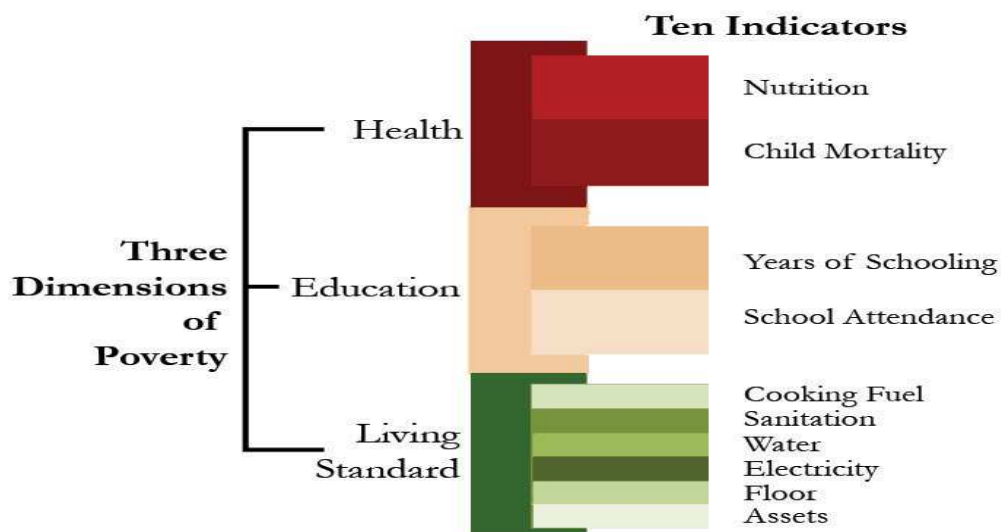
Table 7: State Wise Human Development Index of India

Rank	State/Union Territory	HDI (2005 Data)
High Human Development		
1	Chandigarh	0.860
2	Kerala	0.814
Medium Human Development		
3	Lakshadweep	0.796
4	Mizoram	0.790
5	Delhi	0.789
6	Goa	0.779
7	Nagaland	0.770
8	Andaman and Nicobar Islands	0.766
9	Daman and Diu	0.754
10	Puducherry	0.748
11	Manipur	0.707
12	Maharashtra	0.689
Low Human Development		
32	Uttar Pradesh	0.490
33	Madhya Pradesh	0.488
34	Orissa	0.452
35	Bihar	0.449

Source: Anonymous(2013)

- **What is the Multidimensional Poverty Index?**

The Multidimensional Poverty Index (MPI) identifies multiple deprivations at the individual level in health, education and standard of living. It uses micro data from household surveys, and unlike the Inequality-adjusted Human Development Index, all the indicators needed to construct the measure must come from the same survey. Each person in a given household is classified as poor or non-poor depending on the number of deprivations his or her household experiences. This data are then aggregated into the national measure of poverty.



Source: www.poverty.com

Figure 2

What Does the MPI Measure?

The MPI identifies overlapping deprivations at the household level across the same three dimensions as the Human Development Index (living standards, health, and education) and shows the average number of poor people and deprivations with which poor households contend.

Why is the MPI better Than the Human Poverty Index (HPI, Which Was Previously Used in the Human Development Reports?)

The MPI replaced the HPI, which was published from 1997 to 2009. Pioneering in its day, the HPI used country averages to reflect aggregate deprivations in health, education, and standard of living. It could not identify specific individuals, households or larger groups of people as jointly deprived. The MPI addresses this shortcoming by capturing how many people experience overlapping deprivations (prevalence) and how many deprivations they face on average (intensity). The MPI can be broken down by indicator to show how the composition of multidimensional poverty changes for different regions, ethnic groups and so on—with useful implications for policy.

MPI Value

The MPI value summarizes information on multiple deprivations into a single number. It is calculated by multiplying the incidence of poverty by the average intensity of poverty.

Table 8: MPI in Some Developing Countries

Country	MPI	% of People Who Are MPI Poor	Average Intensity of MPI Poverty	Number of MPIP or People (Thousands)	% of People Who Are Income Poor (\$1.25/Day)	% of People Who Are Income Poor (\$2.00/Day)
Bangladesh	0.292	57.8	50.4	83,207	49.6	81.3
China	0.056	12.5	44.9	161,675	15.9	36.3
Ethiopia	0.562	88.6	63.5	65,798	39.0	77.6
India	0.283	53.7	52.7	612,203	41.6	75.6
Pakistan	0.264	49.4	53.4	81,236	22.6	61.0
Sri Lanka	0.021	5.3	38.7	1,027	7.0	29.1

Source: www.poverty.com

What are the Main Limitations of the MPI?

The MPI has some drawbacks, due mainly to data constraints. First, the indicators include both outputs (such as years of schooling) and inputs (such as cooking fuel) as well as one stock indicator (child mortality, which could reflect a death that was recent or long ago), because data are not available for all dimensions.

Second, the health data are relatively weak and overlook some groups' deprivations especially for nutrition, though the patterns that emerge are plausible and familiar.

Third, in some cases careful judgments were needed to address missing data. But to be considered multi dimensionally poor, households must be deprived in at least six standard of living indicators or in three standard of living indicators and one health or education indicator. This requirement makes the MPI less sensitive to minor inaccuracies.

Fourth, intra-household inequalities may be severe, but these could not be reflected. Fifth, while the MPI goes well beyond a headcount to include the intensity of poverty experienced, it does not measure inequality among the poor, although decompositions by group can be used to reveal group-based inequalities. Finally, the estimates presented here are based on publicly available data and cover various years between 2000 and 2010, which limits direct cross-country comparability.

CONCLUSIONS

- There are large differences among various estimates of poverty and they are mainly because of using different price indices and weights.
- The fixed basket will vary over time and space. The per capita energy requirements of different states may be different on the basis of agro-climatic conditions, age, sex and occupational structure of population. Over time, the fixed basket may require change, because there have been significant changes in the consumption pattern of all sections of population.
- Before selecting a set of poverty indicators, it is important to be clear on exactly what one wants to measure and why. Different approaches to poverty measurement are required for different types and levels of poverty.
- In the case of the absolute poverty approach, poverty is a lack of income in order to satisfy the essential requirements for physiological survival. In the case of the relative approach of poverty, poverty is a lack of income in order to reach the average standard of living in the society in which one live.
- The Multidimensional measures uses micro data from household surveys and aggregated into the national

measure of poverty. The MPI methodology considers local cultural, economic, climatic and other factors while measuring the poverty.

- The total poverty ratio declined by 0.85 percentage points per annum in the pre-reform period(1983-94) and 0.70 percentage points in the post reform period(1994-05).However when normalized with base year values ,the extent of reduction is almost same in both the periods
- Over the years, India's poverty has been reducing relatively while in BIMARU state, the rate of decrease is very slow.
- One of the prime reason for the slow reduction of poverty line in India is the "*Welfare trap*".

POLICY IMPLICATIONS

- There is a changing trend in living standards of the people, the luxuries in the past have become basic necessity today, therefore in measuring poverty along with food other necessity should be considered.
- If one were considered fixing poverty line based on calorie standard, the poverty line would have to revise recurrently and this has a little political support in India as this would increase the number of poor.
- India is witnessing a faster economic growth, but this has benefitted the rich, even though the average income is rising there is no much poverty reduction instead it is widening the gap. In India there is rapid expansion in high-technology industries and is likely to disproportionately benefit the well-educated.
- International institutions such as, World Bank considers not only the number of poor whose income is low, but also other social indicators such as infant and child mortality rates and life expectancy rate and participation in education(Multidimensional) in arriving at poor. So such measures have to be taken into consideration in our country in arriving at calculation of poor.
- India has a 42% of the population living below the new international poverty line, and thus it forms a serious situation on the policy makers to reduce the percentage in coming years.

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